

WHAT IS CLAIMED IS:

1. A plasma chamber comprising a lower electrode and an upper electrode, and used for dry-etching an LCD, comprising:

a main power supply comprising a main power source to generate a main voltage having a predetermined main frequency, and a first impedance matching circuit to impedance-match the main voltage;

a bias power supply comprising a bias power source to generate a bias voltage having a predetermined bias frequency, and a second impedance matching circuit to impedance-match the bias voltage; and

a mixer connected to both the first impedance matching circuit and the second impedance matching circuit, receiving and mixing the main voltage and the bias voltage, and outputting the mixed voltage to one of the lower electrode and the upper electrode.

2. The plasma chamber according to claim 1, further comprising at least one auxiliary power supply comprising an auxiliary power source to generate an auxiliary voltage having a predetermined frequency, and an auxiliary impedance matching circuit to impedance-match the auxiliary voltage, wherein

the mixer is connected to the auxiliary impedance matching circuit of the auxiliary power supply, receives

and mixes the main voltage, the bias voltage and the auxiliary voltage, and outputs the mixed voltage to one of the lower electrode and the upper electrode.

3. The plasma chamber according to claim 1, wherein the mixer outputs the mixed voltage by adding the received voltages.

4. The plasma chamber according to claim 2, wherein the mixer outputs the mixed voltage by adding the received voltages.

5. The plasma chamber according to claim 1, wherein the bias frequency is lower than the main frequency.

6. The plasma chamber according to claim 2, wherein the bias frequency is lower than the main frequency.